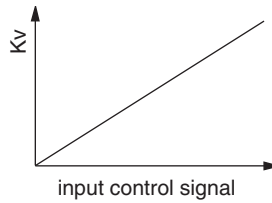


## FEATURES

- Precise, quick-acting and robust valve suitable for use in outside industrial environments
- Exceptional long service life
- Variable flow proportional to the control signal
- Real-time control
- Ready-to-use valve
- The positioner can be directly connected to an external sensor (double loop control)
- Power saving function and no air consumption when position is reached
- Manual valve operator
- LED indicators for valve status display
- Valves satisfy the Pressure Equipment Directive 2014/68/EU, EN 161 and satisfy the Regulation (EU) 2016/426 on gas appliances  
**EU type examination certificate no.: CERTIGAZ 1312CP5992**

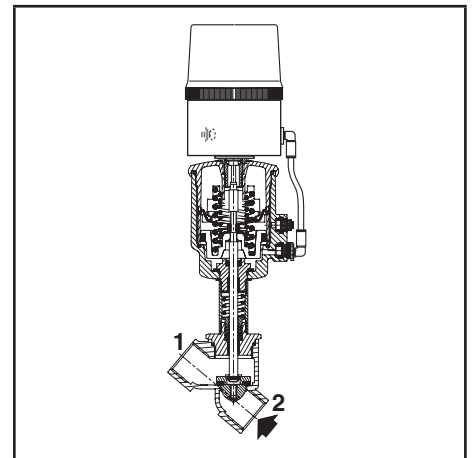


## GENERAL

<b>Differential pressure</b>	1 bar [1 bar = 100 kPa]
<b>Maximum allowable pressure</b>	16 bar
<b>Ambient temperature range</b>	0°C to +50°C
<b>Maximum viscosity</b>	600 cSt (mm <sup>2</sup> /s)
<b>Pilot fluid</b>	Air or inert gas, filtered 25 µm, unlubricated, condensate-free and water-free (observe the pressure dew point)
<b>Pilot pressure</b>	5 to 8 bar
<b>Pilot fluid temperature</b>	0°C to +50°C

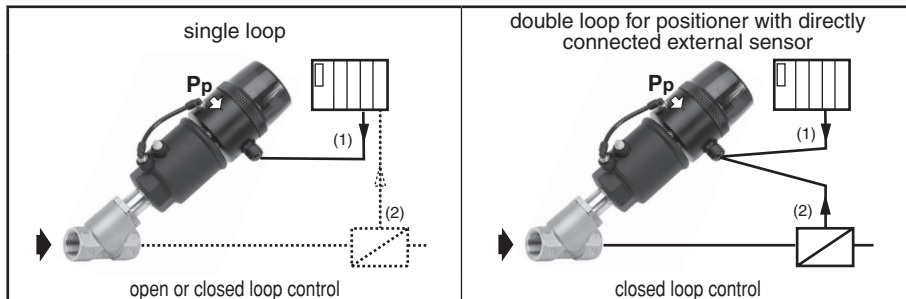
## ELECTRICAL CHARACTERISTICS

<b>Setpoint reached output</b>	ON/OFF, 24 V PNP / max. 500 mA
<b>Analog position feedback signal</b>	0-10 V / 4-20 mA
<b>Analog setpoint</b>	0-10V (R <sub>in</sub> = 200 kΩ); 4-20 mA (R <sub>in</sub> = 250 Ω)
<b>Nominal supply voltage</b>	24 V DC ± 10%, max. ripple 10%
<b>Power</b>	7,6 W (3,6 W, setpoint reached)
<b>Connection</b>	Screw terminals, cable gland (cable Ø 5-10 mm) or connection M12 (CNOMO E03.62.520.N)
<b>Degree of protection</b>	IP66 (EN 60529)
<b>Electromagnetic compatibility</b>	EMC 2004/108/EC
<b>Regulation characteristics</b>	Hysteresis < 2% Accuracy < 2% Repeatability < 1%



## CONSTRUCTION

<b>Valve disc (2/2)</b>	Profiled disc, stainless steel and PTFE
<b>Positioner body</b>	Aluminium
<b>Cover</b>	PA 12, transparent



(1) Setpoint  
(2) Value measured by the process sensor

(3) The actuator exhaust air is used to ventilate the electronics housing.

**SPECIFICATIONS**

pipe size (DN)	orifice size (mm)	pilot pressure (bar)		operator diameter (mm)	flow (Kv), opening of proportional valve		catalogue number		suffix for proportional valve and positioner / delivered assembled fail close / 2 way																			
		min.	max.		(m³/h)	(l/min)	(G*)	(NPT)	analog setpoint																			
									0 - 10 V DC				4 - 20 mA															
		single loop			double loop		single loop		double loop		cable gland		M12		cable gland		M12											
<b>NC - Normally closed, entry under the disc</b>																												
1/2 (15)	15	5	8	63	4,6	77	<b>EGE290B045</b>	<b>EG8290B045</b>																				
3/4 (20)	20				7,1	118	<b>EGE290B047</b>	<b>EG8290B047</b>																				
1 (25)	25				15	250	<b>EGE290B051</b>	<b>EG8290B051</b>																				
1 1/4 (32)	32				21	350	<b>EGE290B057</b>	<b>EG8290B057</b>	<b>PDB66</b>	<b>PDB70</b>	<b>PDB72</b>	<b>PDB74</b>	<b>PDB67</b>	<b>PDB71</b>	<b>PDB73</b>	<b>PDB75</b>												
1 1/2 (40)	40				29	483	<b>EGE290B063</b>	<b>EG8290B063</b>																				
2 (50)	50	40	667	<b>EGE290B067</b>	<b>EG8290B067</b>																							

Order example: EGE290B045PDB66

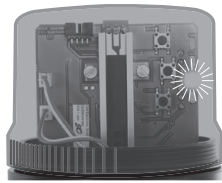
**OPTIONS AND ACCESSORIES**

<ul style="list-style-type: none"> <li>- 5 pins, with screw terminals,</li> <li>- Supply cable 5 m,</li> <li>- Supply cable 5 m,</li> <li>- Supply cable 10 m,</li> </ul>	<ul style="list-style-type: none"> <li>Female M12 connector: straight</li> <li>catalogue number: <b>88100256</b></li> <li>5 x 0,25 mm², catalogue number: <b>88130212</b></li> <li>6 x 0,5 mm², catalogue number: <b>88100728</b></li> <li>6 x 0,5 mm², catalogue number: <b>88100730</b></li> </ul>
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**INSTALLATION**

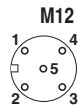
- Pilot port G 1/8 according to ISO 228/1
- Compatible with ASTM 1, 2 and 3 oils
- Installation/maintenance instructions are included with each proportional valve
- LED indicators for operating status display and diagnostic functions (Unit can be rotated through 360° around the centreline of the valve operator)

status	hold position
	valve OPEN
	valve CLOSED
	valve moves to open
	valve moves to close
	positioner in initialisation mode
diagnostics	positioner in manual mode
	setpoint > 20,5 mA / 10,25 V
	setpoint < 3,5 mA
	positioner not initialised
	component error



Electrical connection:

**Positioner<sup>D</sup>, single loop**  
screw terminals



1	+ 24 V DC, supply	1
2	GND supply	3
3	+ setpoint (0-10 V or 4-20 mA)	2
4	GND setpoint	3
6	disc position feedback	4
7	+ 24V ON/OFF output	5

**Positioner<sup>D</sup>, double loop**  
screw terminals



1	+ 24 V DC, supply	1
2	GND supply	3
3	+ setpoint (0-10 V or 4-20 mA)	2
4	GND setpoint	3
5	external sensor input	4
7	+ 24V ON/OFF output	5

**SPARE PARTS KITS**

pipe size (DN)	spare parts kit no.
	stainless steel (E290)
<b>Valve disc seals</b>	
1/2 (15)	C131204
3/4 (20)	C131205
1 (25)	C131206
1 1/4 (32)	C131207
1 1/2 (40)	C131208
2 (50)	C131209

**DIMENSIONS (mm), WEIGHT (kg)**



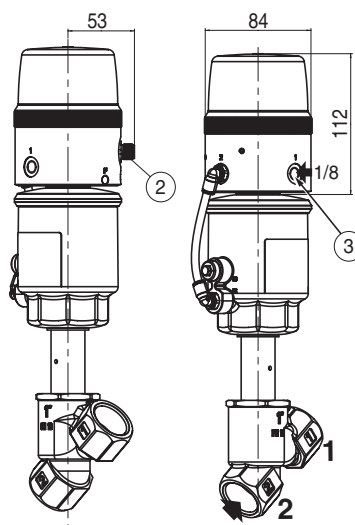
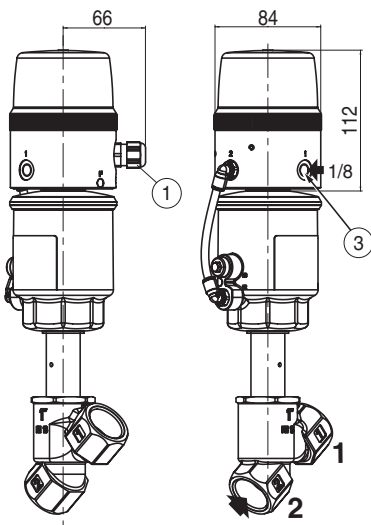
**TYPE 01**

Enclosure with cable gland  
63 mm operator  
Fluid entry:  
under the disc at 2



**TYPE 02**

Enclosure with M12 connection  
63 mm operator  
Fluid entry:  
under the disc at 2



- ① M16 x 1,5 mm cable gland (cable Ø 5-10 mm)
- ② M12 connection
- ③ G 1/8 pilot connection

Weight of positioner without valve: 0,3 kg

